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10/721,002	11/24/2003	Jean-Emile Elien	MSFT-2752/302033	5648
41505 7590 06/08/2007 WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION) CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891			EXAMINER CAO, PHUONG THAO	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/721,002

Applicant(s)

ELIEN ET AL.

Examiner

Phuong-Thao Cao

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. This action is in response to Amendment filed on 3/23/2007 with an RCE.
2. Claims 1, 13 and 21 have been amended. Currently, claims 1-21 are pending.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/23/2007 has been entered.

Response to Amendment

4. Amendment to the Specification is effective to overcome the objection to the Specification in the previous office action.

Response to Arguments

5. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zou et al. ("Web-Based Specification and Integration of Legacy Services", IBM Press: 2000) in view of Upton (Publication No US 2003/0093471, effective date 10/18/2001).

As to claim 1, Zou et al. teach:

"A computer-implemented system for providing a standardized adapter framework" (see Zou et al., Abstract and [page 3, column 2, paragraph 2-3]), comprising:

“a configuration user interface module for receiving a configuration schema describing configuration information for an adaptor, wherein the configuration user interface module display a single unified user interface for interfacing with any adaptor” (see Zou et al., [page 8, Figures 8 and 9] for the disclosure of Web interface of the service search engine designed to receiving a search specification wherein interface of the search specifications can be considered as a configuration schema that describes the configuration of a search query; and a Web interface of the service search engine which allows users to search for software services wherein each software service represents an adaptor and the Web interface can be considered as a single unified user interface to all adaptors as illustrated in Applicant’s claim language; also see Zou et al., [page 7] and [page 8, Figure 7] wherein service interface description is equivalent to configuration information for an adaptor to that service);

“a metadata utility for automated discovery of service descriptions, the metadata utility receiving at least one metadata file providing data interface information and service description information” (see Zou et al., [page 9, column 1, paragraph 2] wherein the service management module is equivalent to Applicant’s “metadata utility”, “description information in XML form” is equivalent to Applicant’s “metadata file”, and the automated receiving by the service management module the description information in XML form automatically send from object wrapper [page 4, column 2, paragraph 3] is equivalent to Applicant’s “automated discovery of service descriptions”); and

“generating from the configuration schema and the metadata file a configuration file and a service selection file required by an adaptor to connect to an application” (see Zou et al., [page 7, column 2, paragraph 2] and [page 7, column 1, paragraph 2] wherein service description or

XML encoded service interface description is equivalent to Applicant's "configuration file", "table to index the service ID and the corresponding XML service description" is equivalent to Applicant's "service selection file", and the service description is used to access to a software service [page 8, column 1, paragraph 3]; also see Zou et al., [page 4, column 2, paragraph 3] and [page 9, column 1, paragraph 2-4]).

However, Zou et al. does not teach a single user interface for management and setup of the adaptor, thereby eliminating a need for a user to learn to use multiple user interfaces for adaptors.

On the other hand, Upton teaches a single user interface for management and setup of the adaptor, thereby eliminating a need for a user to learn to use multiple user interfaces for adaptors (see Upton, [0043], [0036] and [0033] for the user interfaces or web-based interfaces that allows user to define (setup) application views of an adapter wherein the user interfaces associated with the integration framework utilizing (managing and setting up) many adapters is equivalent to single user interface as illustrated in Applicant's claim language).

It would have been obvious to a person having ordinary skill in the art at the time the inventions was made to incorporate the teaching of Upton to the Zou et al.'s system by adding the function of providing a single user interface for management and setup of adaptor. A skilled artisan would have been motivated to so do as suggested by Upton (see [0032] and [0033]) to simplify the process of managing and utilize software adapters and effectively enhance the functionality of the system. In addition, both of the references (Zou et al. and Upton) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as, service or application integration, application interface and adapter and integration

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framework. This close relation between both of the references highly suggests an expectation of success.

As to claim 2, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Zou et al. and Upton teach:

“wherein the configuration schema comprises a XML schema” (see Zou et al., [page 2, column 2, paragraph 2], [page 5, column 2, paragraph 1] and Fig. 4).

As to claim 3, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Zou et al. and Upton teach:

“wherein the at least one metadata file comprises a WSDL file” (see Zou et al., [page 9, column 1, paragraph 2] wherein service description information in XML form is equivalent to WSDL file since WSDL is defined as an XML format to describe network services; also see [page 5, column 1, paragraph 1] and Fig. 4).

As to claim 4, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Zou et al. and Upton teach:

“wherein the at least one metadata file comprises an XML schema” (see Zou et al., [page 9, column 2, paragraph 4] and Fig. 11 wherein XML interface representation is equivalent to Applicant’s “metadata file comprises an XML schema”; also see Fig. 6).

As to claim 5, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Zou et al. and Upton teach:

“further comprising a data store for storing the configuration file” (see Zou et al., [page 7, column 1, paragraph 2-3] wherein “XML encoded service interface description” or “XML document” is equivalent to Applicant’s “configuration file” and database is equivalent to Applicant’s “data store”).

As to claim 6, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Zou et al. and Upton teach:

“further comprising a data store for storing the service selection file” (see Zou et al., [page 7, column 1, paragraph 2 wherein database is equivalent to Applicant’s “data store” and “table to index the service ID and the corresponding XML service description” is equivalent to Applicant’s “service selection file”).

As to claim 7, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Zou et al. and Upton teach:

“wherein the configuration file is an XML file” (see Zou et al., [page 2, column 2, paragraph 2] and [page 7, column 1, paragraph 2-3] wherein XML document including configuration information [page 6, column 1, paragraph 1] is equivalent to Applicant’s “configuration file”).

As to claim 8, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Zou et al. and Upton teach:

“wherein a unified user interface is generated from the configuration schema and the at least one metadata file” (see Zou et al., [page 7, column 2, paragraph 3] wherein available facts and the DTD of each fact as disclosed [also see page 5] equivalent to Applicant’s “configuration schema and the at least one metadata file”).

As to claim 9, this claim is rejected based on arguments given above for rejected claim 8 and is similarly rejected including the following:

Zou et al. and Upton teach:

“wherein information entered via the unified user interface is stored in the configuration file” (see Zou et al., [page 7] wherein the service description is equivalent to Applicant’s “configuration file” since it configures how to access to services, and the disclosure of the service description generated automatically from the information provided by the user is equivalent to Applicant’s claim language).

As to claim 10, this claim is rejected based on arguments given above for rejected claim 8 and is similarly rejected including the following:

Zou et al. and Upton teach:

“wherein information entered via the unified user interface is stored in the service selection file” (see Zou et al., [page 7] wherein “table to index the service ID and corresponding XML service description” is equivalent to Applicant’s “the service selection file”, and the disclosure of inserting service description generated from user input into the index table is equivalent to Applicant’s claim language).

As to claim 11, this claim is rejected based on arguments given above for rejected claim 2 and is similarly rejected including the following:

Zou et al. and Upton teach:

“wherein the XML schema is received from the adaptor associated with the configuration file” (see Zou et al., [page 9, column 1, paragraph 2-3] wherein “description information in XML form” is equivalent to Applicant’s “XML schema” and see [page 4, column 3, paragraph 3] wherein CORBA object wrapper is equivalent to Applicant’s “adaptor”).

As to claim 12, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Zou et al. and Upton teach:

“wherein the at least one metadata file is received from the adaptor associated with the configuration file” (see Zou et al., [page 9, column 1, paragraph 2] and [column 10, column 1, paragraph 1] wherein description information in XML form including self-description information (metadata) is equivalent to Applicant’s “metadata file”).

As to claim 13, Zou et al. teach:

“A method for providing a standardized adaptor framework” (see Zou et al., Abstract, [page 3, column 2, paragraph 3] and [page 7, column 2, paragraph 2-3]), comprising:

“receiving a description of configuration data associated with an adaptor via automated discovery of service descriptions” (see Zou et al., [page 9, column 1, paragraph 2] wherein description information is equivalent to Applicant’s “description of configuration data”, and see [page 4, column 2, paragraph 3] wherein each CORBA object wrapper is equivalent to Applicant’s “adaptor”, and the automated receiving by the service management module the description information in XML form automatically send from object wrapper [page 4, column 2, paragraph 3] is equivalent to Applicant’s “automated discovery of service descriptions”);

“generating an adapter-specific user interface from the configuration data description, wherein the adaptor-specific user interface is displayed as a single unified user interface for interface with any adaptor” (see Zou et al., [page 7, column 2, paragraph 3] wherein the user interface generated dynamically according to available facts and the DTD of each fact is equivalent to Applicant’s “adapter-specific user interface” and the DTD of each fact [page 7, column 1, paragraph 2] is equivalent to Applicant’s “configuration data description”; also see [page 8, column 2] for the teaching of a Web interface of the service search engine which allows

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users to search for software services wherein each software service represents an adapter and the Web interface can be considered as a single unified user interface to all adaptors as illustrated in Applicant's claim language);

“receiving instance-specific data from the adaptor-specific user interface” (see Zou et al., [page 7, column 2, paragraph 3] wherein selecting required facts from the interface implies the receiving of information relating to those facts as illustrated in Applicant's claim language); and

“saving the instance-specific data and the description of configuration data in an XML file” (see Zou et al., [page 6, column 1, paragraph 1] and [page 7, column 1-2] wherein description facts is equivalent to Applicant's “instance-specific data”, XML encoded service interface description or the whole XML document including independent facts as disclosed is equivalent to Applicant's “XML file”, and the disclosure of the ability to insert a new service description and interface to accept user input of description facts implies the saving of data as illustrated in Applicant's claim language).

However, Zou et al. does not teach wherein the configuration data is used for management and setup of the adaptor and thereby eliminating a need for a user to learn to use multiple user interfaces for adaptors.

On the other hand, Upton teaches wherein the configuration is used for management and set up of the adaptor and thereby eliminating a need for a user to learn to use multiple user interfaces for adaptors (see Upton, [0043], [0036] and [0033] for the user interfaces or web-based interfaces that allows user to define (setup) application views of an adapter wherein the user interfaces associated with the integration framework utilizing (managing and setting up) many adapters is equivalent to single user interface as illustrated in Applicant's claim language).

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It would have been obvious to a person having ordinary skill in the art at the time the inventions was made to incorporate the teaching of Upton to the Zou et al.'s system by adding the function of using configuration data for management and setup of adaptor. A skilled artisan would have been motivated to so do as suggested by Upton (see [0032] and [0033]) to simplify the process of managing and utilize software adapters and effectively enhance the functionality of the system. In addition, both of the references (Zou et al. and Upton) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as, service or application integration, application interface and adapter and integration framework. This close relation between both of the references highly suggests an expectation of success.

As to claim 14, this claim is rejected based on arguments given above for rejected claim 13 and is similarly rejected including the following:

Zou et al. and Upton teach:

“saving the XML file in a data store” (see Zou et al., [page 7, column 1, paragraph 2-3] wherein XML encoded service interface description is equivalent to Applicant's “XML file” and database is equivalent to Applicant's “data store”).

As to claim 15, this claim is rejected based on arguments given above for rejected claim 13 and is similarly rejected including the following:

Zou et al. and Upton teach:

“wherein the description of configuration data is an XML schema” (see Zou et al., Fig. 4 and [page 5]).

As to claim 16, this claim is rejected based on arguments given above for rejected claim 13 and is similarly rejected including the following:

Zou et al. and Upton teach:

“further comprising receiving information associated with data interface and service description” (see Zou et al., [page 9, column 1, paragraph 2] for the disclosure of the service management module receiving description information in XML form which includes interface information and service description of a software component as illustrated in Applicant’s claim language).

As to claim 17, this claim is rejected based on arguments given above for rejected claim 16 and is similarly rejected including the following:

Zou et al. and Upton teach:

“wherein the information associated with data interface and service description is a WSDL specification” (see Zou et al., [page 9, column 1, paragraph 2] wherein service description information in XML form is equivalent to WSDL specification since WSDL is defined as an XML format to describe network services; also see [page 5, column 1, paragraph 1] and Fig. 4).

As to claim 18, this claim is rejected based on arguments given above for rejected claim 13 and is similarly rejected including the following:

Zou et al. and Upton teach:

“further comprising receiving a message associated with an application request” (see Zou et al., [page 4, column 1, paragraph 3] wherein request for a servlet is equivalent to Applicant’s “message associated with an application request”).

As to claim 19, this claim is rejected based on arguments given above for rejected claim 14 and is similarly rejected including the following:

Zou et al. and Upton teach:

“further comprising receiving a message associated with an application request and selecting an XML file from the data store, the XML file associated with the application request” (see Zou et al., [page 9, column 1, paragraph 3-4] and [page 7, column 1, paragraph 2-3] wherein service request is equivalent to Applicant’s “message associated with an applicant’s request”, and XML document must be selected from service repository to localize requested service as disclosed in [page 8, column 1, paragraph 3]).

As to claim 20, this claim is rejected based on arguments given above for rejected claim 19 and is similarly rejected including the following:

Zou et al. and Upton teach:

“further comprising sending the XML file to the adaptor” (see Zou et al., [page 13, column 2, paragraph 1] wherein script encoded in XML is equivalent to Applicant’s “XML file” and this script must be sent to the adaptor of the service to invoke the service; also see [page 3, column 2, paragraph 3]).

As to claim 21, the combination of Zou et al. and Upton teaches:

“A computer storage medium comprising computer-executable instructions” (see Zou et al., Abstract) for:

“receiving a description of configuration data associated with an adaptor via automated discovery of service descriptions, wherein the configuration data is used for management and setup of the adaptor” (see Zou et al., [page 9, column 1, paragraph 2] wherein description information is equivalent to Applicant’s “description of configuration data”, and see [page 4, column 3, paragraph 3] wherein CORBA object wrapper is equivalent to Applicant’s “adaptor”, and the automated receiving by the service management module the description information in XML form automatically send from object wrapper [page 4, column 2, paragraph 3] is equivalent to Applicant’s “automated discovery of service descriptions”; see Upton, [0043], [0036] and [0033] for the user interfaces or web-based interfaces that allows user to define (setup) application views of an adapter wherein the user interfaces associated with the integration framework utilizing (managing and setting up) many adapters is equivalent to single user interface as illustrated in Applicant’s claim language);

“generating an adapter-specific property page from the configuration data description” (see Zou et al., [page 7, column 2, paragraph 3] and [page 5] wherein the user interface generated dynamically according to available facts and the DTD of each fact is equivalent to Applicant’s “adapter-specific property page” and the DTD of each fact [page 7, column 1, paragraph 2] is equivalent to Applicant’s “configuration data description”);

“receiving instance-specific data from the property page” (see Zou et al., [page 7, column 2, paragraph 3] wherein Web interface is equivalent to Applicant’s “property page” and selecting

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required facts from the interface implies the receiving those information as illustrated in

Applicant's claim language); and

“displaying a single unified user interface for interfacing with any adaptor, thereby eliminating a need for a user to use multiple user interfaces for adaptors” (see Zou et al., [page 8, column 2] for the teaching of a Web interface of the service search engine which allows users to search for software services wherein each software service represents an adaptor and the Web interface can be considered as a single unified user interface to all adaptors as illustrated in Applicant's claim language; also see Upton, [0043], [0036] and [0033] for the user interfaces or web-based interfaces that allows user to define (setup) application views of an adapter wherein the user interfaces associated with the integration framework utilizing (managing and setting up) many adapters is equivalent to single user interface as illustrated in Applicant's claim language).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong-Thao Cao whose telephone number is (571) 272-2735. The examiner can normally be reached on 8:30 AM - 5:00 PM (Mon - Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


CHARLES RONES
SUPERVISORY PATENT EXAMINER

Phuong-Thao Cao
Art Unit 2164
May 31, 2007